

Flight Scientist Report

Wednesday 09/30/2020 ACTIVATE RF40

Flight Type: Statistical Surve Flight: Zibut to the north

Flight Route: KLF1 ATLC ZIBUT 3656N07125W ZIBUT ATLC KLF1

Special Notes:

This flight was designed to work an area just upwind of a strong cold front moving to the east. The flight track (ZIBUT to north) essentially paralleled the west edge of the front and we took off at noon to allow the front to advance farther east so we could work north of ZIBUT.

Flight revealed the usual dry conditions aloft in a post-frontal situation

King Air

Flight went well.

5 dropsondes

Falcon

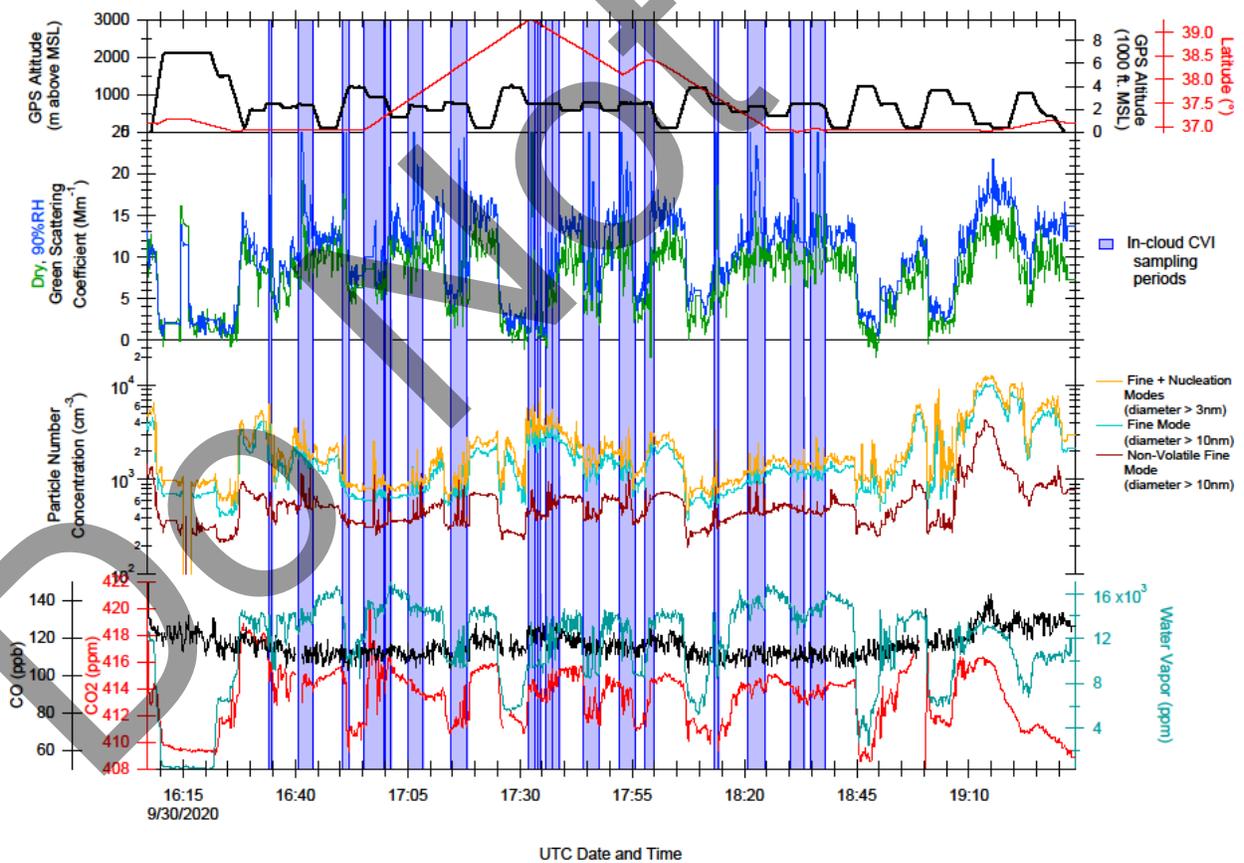
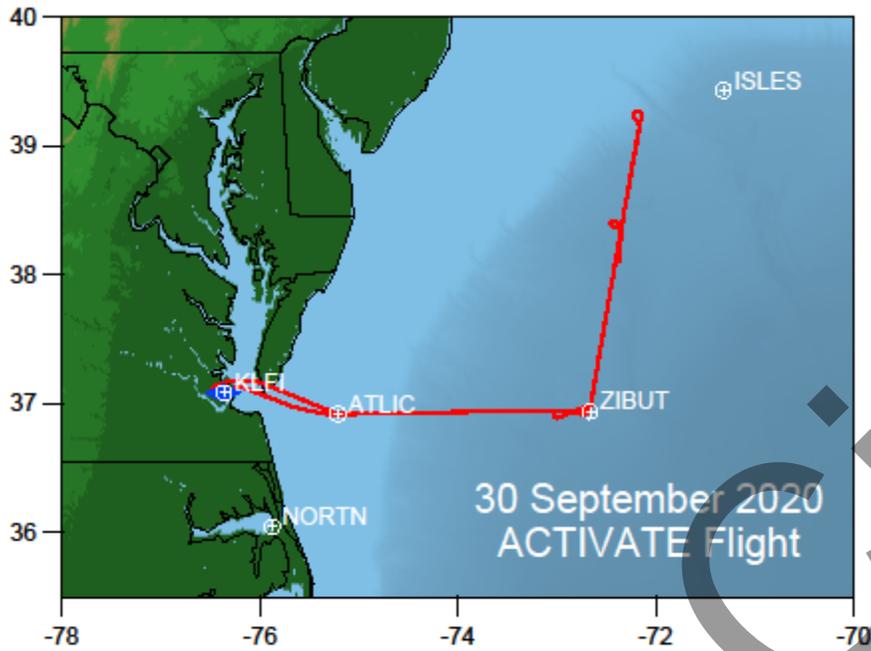
Gradients in N_d today.

Rough seas to north; quite a bit of turbulence.

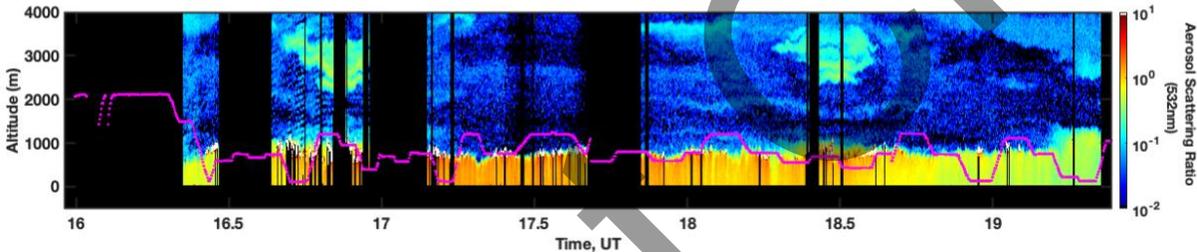
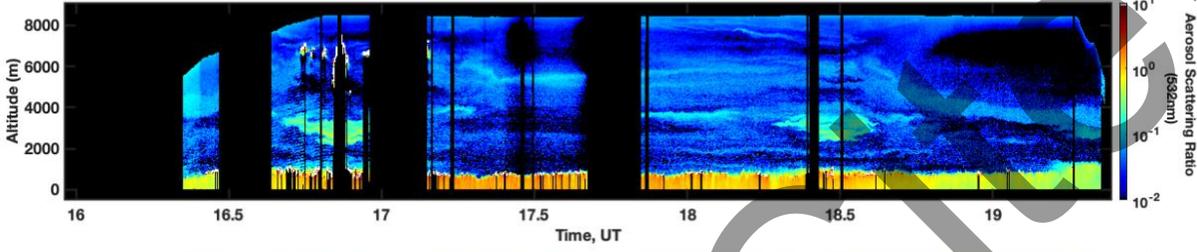
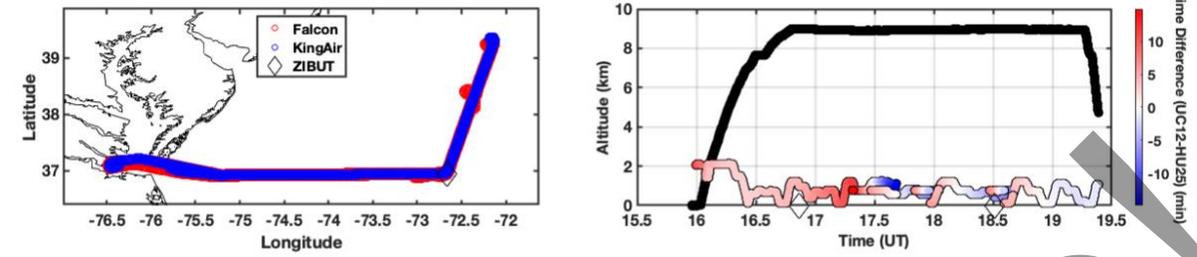
2DS issue from last flight resolved.

Some pockets of clear and cloudy air, but mainly cloudy.

Rich Moore Quicklook Images:



20200930 - ACTIVATE - KingAir and Falcon flight tracks

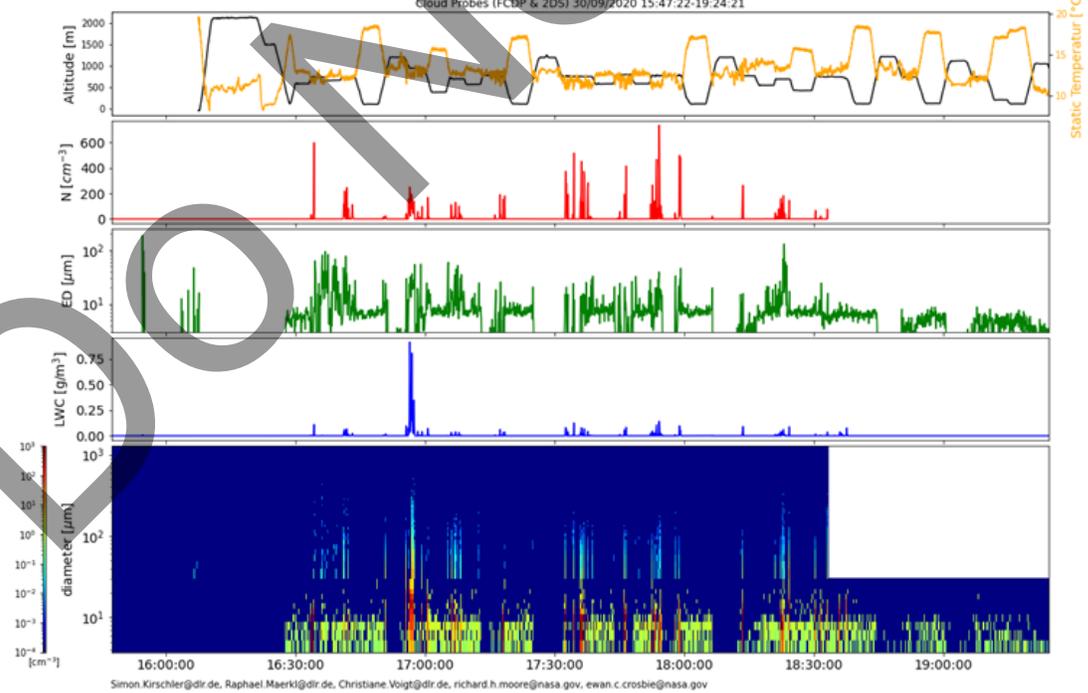


Quicklook ACTIVATE Cloud Probes (FCDP & 2DS)

preliminary data, only for quicklook use

Simon Kirschlner, Raphael Märkl, Christiane Voigt, Richard Moore, Ewan Crosbie

Cloud Probes (FCDP & 2DS) 30/09/2020 15:47:22-19:24:21



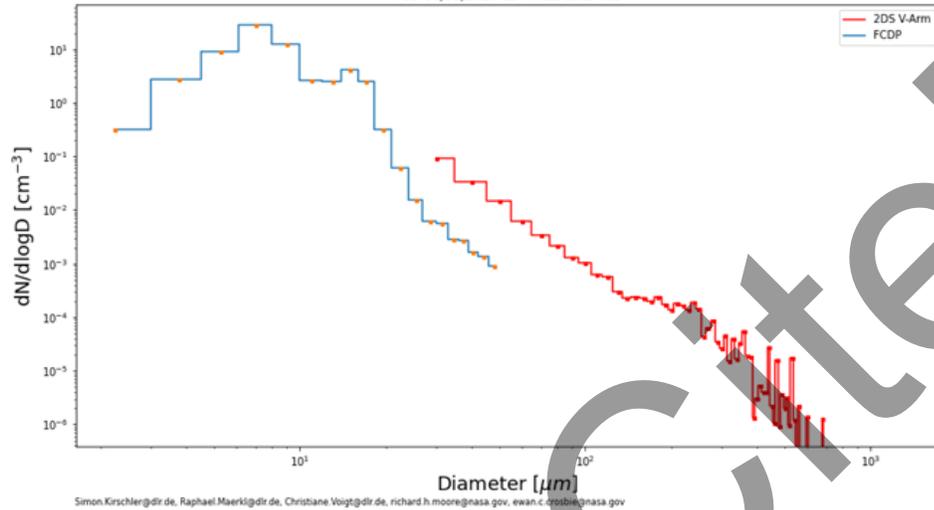
Simon.Kirschlner@dlr.de, Raphael.Maerkl@dlr.de, Christiane.Voigt@dlr.de, richard.h.moore@nasa.gov, ewan.c.crosbie@nasa.gov

PSD ACTIVATE

preliminary data, only for quicklook use
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PSD 30/09/2020 15:47:22-19:24:21



16:33



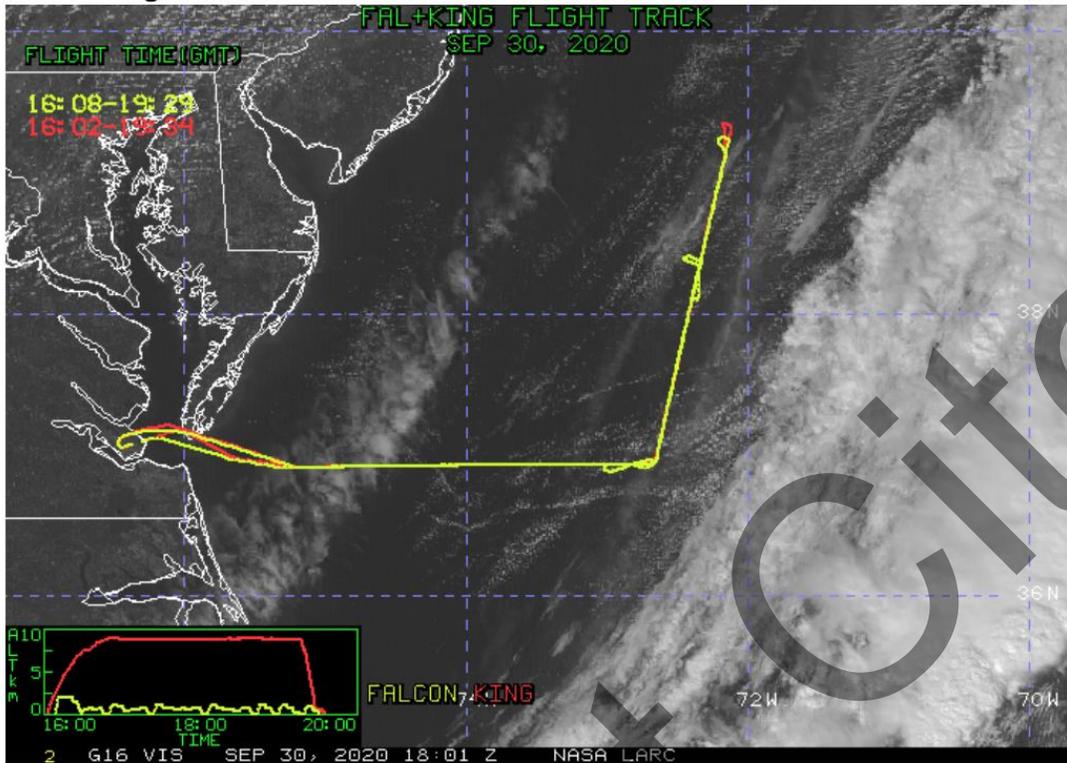
17:05



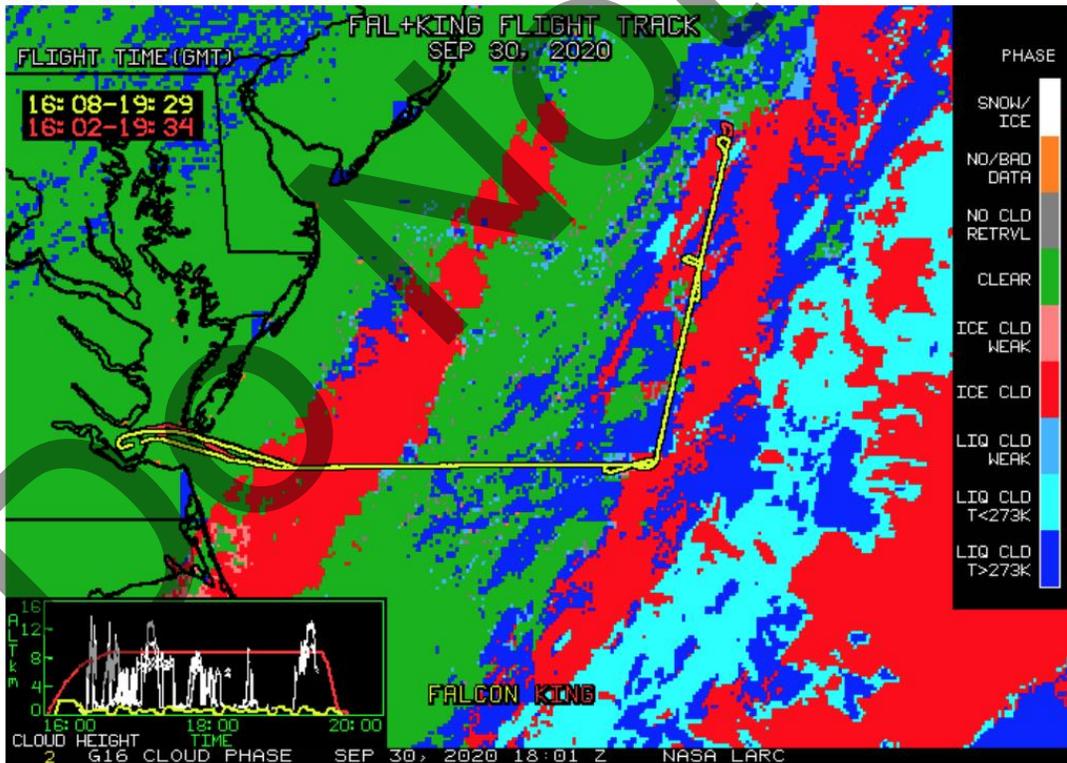
No ice

NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 40, 1801 UTC Sep 30, 2020

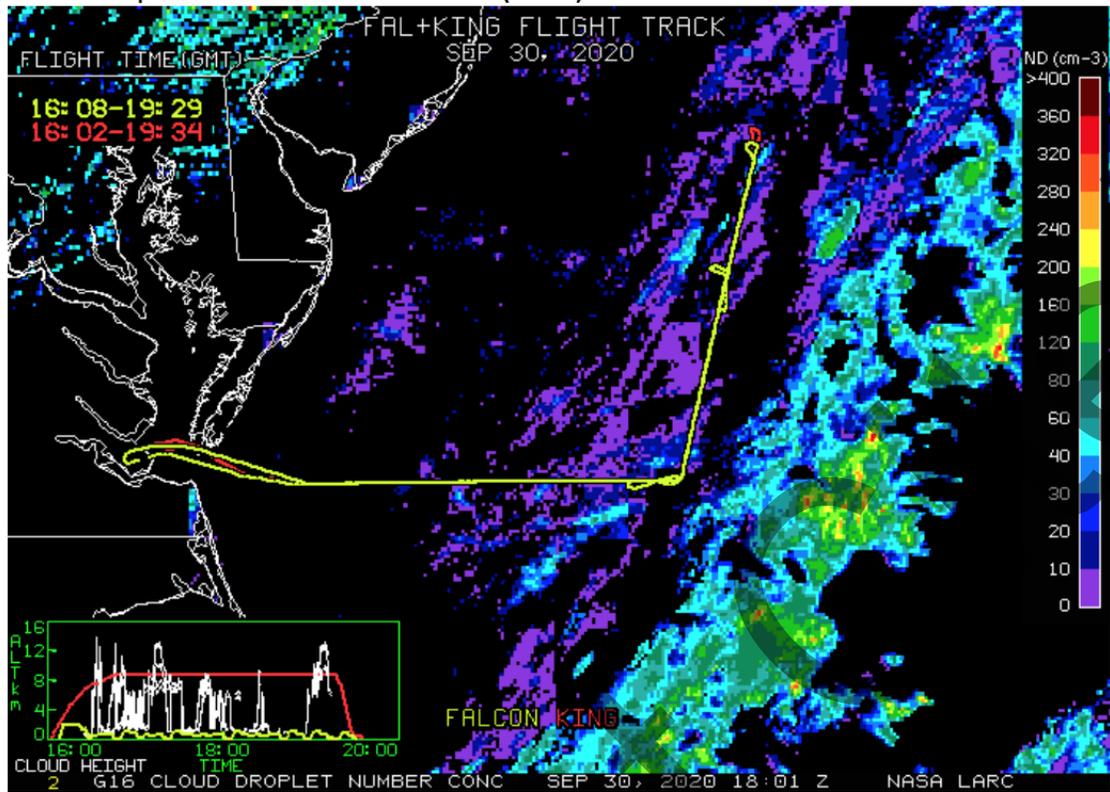
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

